## **CLAIMS**

In a computer system, a method comprising:
 obtaining one or more server actors;
 linking said server actors in a source hierarchical tree;
 generating a client actor tree representation corresponding to a subset of said server actors;

sending said actor tree representation to said client; and creating a member hierarchical tree in said client using said actor tree representation.

- 2. The method of claim 1, wherein each node in said source hierarchical tree comprises a source actor.
- 3. The method of claim 2, wherein each node in said member hierarchical tree comprises a member actor.
- 4. The method of claim 3, wherein each of said member actor is complementary to a source actor.
- The method of claim 4, further comprising:
   providing a communication interface between each member actor and its
   complementary source actor.

- 6. The method of claim 1, wherein each said actor comprises a tree of hierarchically linked nodes, said nodes comprising one or more objects.
- 7. The method of claim 6, wherein said nodes further comprise one or more nested actors.
- 8. The method of claim 1, wherein said sending said actor tree representation comprises sending said tree representation via a secure communication network.
- 9. The method of claim 3, wherein said generating a client actor tree representation comprises:

obtaining inclusion criteria from one or more parameter sets;

traversing said source hierarchical tree to determine nodes of said source hierarchical tree that comply with said inclusion criteria;

obtaining a pre-initialized object for each of said nodes that comply with said inclusion criteria;

generating a client graph comprising said pre-initialized objects.

- 10. The method of claim 9, wherein said traversing said source hierarchical tree is on a node-by-node basis starting from the root node and proceeding through all the leaf nodes.
- 11. The method of claim 3, wherein said client actor tree representation comprises the full client graph.

- 12. The method of claim 3, wherein said client actor tree representation comprises a subgraph for updating existing actor tree of said client.
- 13. The method of claim 9, wherein said pre-initialized object comprises methods and attributes for construction and initialization of said client graph.
  - 14. A computer program product comprising:

a computer readable medium having computer program code embodied therein for creating and deploying client side actors for a server application, said computer readable medium comprising computer program code configured to cause a computer to:

obtain one or more server actors;

link said server actors in a source hierarchical tree;

generate a client actor tree representation corresponding to a subset of said server actors;

send said actor tree representation to said client; and create a member hierarchical tree in said client using said actor tree representation.

15. The computer program product of claim 14, wherein each node in said source hierarchical tree comprises a source actor.

- 16. The computer program product of claim 15, wherein each node in said member hierarchical tree comprises a member actor.
- 17. The computer program product of claim 16, wherein each of said member actor is complementary to a source actor.
- 18. The computer program product of claim 17, further comprising: computer program code configured to provide a communication interface between each member actor and its complementary source actor.
- 19. The computer program product of claim 14, wherein each said actor comprises a tree of hierarchically linked nodes, said nodes comprising one or more objects.
- 20. The computer program product of claim 19, wherein said nodes further comprise one or more nested actors.
- 21. The computer program product of claim 14, wherein said send said actor tree representation comprises sending said tree representation using a secure communication network.
- 22. The computer program product of claim 16, wherein said generate a client actor tree representation comprises:

obtaining inclusion criteria from a parameter set;

traversing said source hierarchical tree to determine nodes of said source hierarchical tree that comply with said inclusion criteria;

obtaining a pre-initialized object for each of said nodes that comply with said inclusion criteria;

generating a client graph comprising said pre-initialized objects.

- 23. The computer program product of claim 22, wherein said traversing said source hierarchical tree is on a node-by-node basis starting from the root node and proceeding through all the leaf nodes.
- 24. The computer program product of claim 17, wherein said client actor tree representation comprises the full client graph.
- 25. The computer program product of claim 17, wherein said client actor tree representation comprises a subgraph for updating existing actor tree of said client.
- 26. The computer program product of claim 21, wherein said preinitialized object comprises methods and attributes for construction and initialization of said client graph.
  - 27. An apparatus comprising: one or more clients;

a server comprising one or more server actors linked in a source hierarchical tree, said server generating a client tree representation for each of said one or more clients;

a communication interface between said server and said each of said one or more clients, said server sending said client tree representation via said communication interface, each of said one or more clients creating a member hierarchical tree based on said client tree representation.

- 28. The apparatus of claim 27, wherein each node in said source hierarchical tree comprises a source actor.
- 29. The apparatus of claim 28, wherein each node in said member hierarchical tree comprises a member actor.
- 30. The apparatus of claim 29, wherein each of said member actor is complementary to a source actor.
- 31. The apparatus of claim 30, further comprising: an application program interface between each member actor and its complementary source actor.
- 32. The apparatus of claim 27, wherein each said actor comprises a tree of hierarchically linked nodes, said nodes comprising one or more objects.

- 33. The apparatus of claim 32, wherein said nodes further comprise one or more nested actors.
- 34. The apparatus of claim 27, wherein said communication interface is secured.
- 35. The apparatus of claim 29, wherein said generating a client tree representation comprises:

obtaining inclusion criteria from a parameter set;

traversing said source hierarchical tree to determine nodes of said source hierarchical tree that comply with said inclusion criteria;

obtaining a pre-initialized object for each of said nodes that comply with said inclusion criteria;

generating a client graph comprising said pre-initialized objects.

- 36. The apparatus of claim 35, wherein said traversing said source hierarchical tree is on a node-by-node basis.
- 37. The apparatus of claim 29, wherein said client actor tree representation comprises the full client graph.
- 38. The apparatus of claim 29, wherein said client actor tree representation comprises a subgraph for updating existing actor tree of said client.

- 39. The apparatus of claim 35, wherein said pre-initialized object comprises methods and attributes for construction and initialization of said client graph.
- 40. An apparatus comprising:

  means for obtaining one or more server actors;

  means for linking said server actors in a source hierarchical tree;

  means for generating a client actor tree representation corresponding to a subset of said server actors;

means for sending said actor tree representation to said client; and means for creating a member hierarchical tree in said client using said actor tree representation.